

Remarks

Claims 29-33 and 39-58 are in the application. Claims 29, 31, 50, and 59 are in independent form. Claims 1-28 and 34-38 are cancelled. Reconsideration is requested.

Added claims 39-44 depend from claim 29, and added claim 45-50 depend from claim 31. Added claims 50 and 59 are in independent form, and added claims 51-58 depend from claim 50.

Claims 29-35 stand rejected under U.S.C. 103(a) for obviousness over Silverbrook et al US 6,813,039 B1 (hereafter Silverbrook) in combination with McIntyre (US 6,958,821, hereafter McIntyre). Applicant responds as follows.

Silverbrook describes “methods and systems for interacting with computers by means of printed matter and sensing devices” (line 34, Col 1). Silverbrook describes a solid state sensor in the shape of a pen (called netpage pen, Fig. 8) for reading printed materials that include a tag. The tag is printed with ink on paper, and the ink is substantially invisible in the visible spectrum, but is substantially visible to the solid state sensor of the pen. The method “includes printing the information on a surface of a surface-defining structure and, at the same time, printing the coded data on the surface, with the coded data preferably being substantially invisible in the visible spectrum.” (Col 2, line 55).

McIntyre describes a method related “to analyzing one or more images of a user to determine the likelihood of user interest in materials that can be sent to the user” (McIntyre, col. 1, line 15). As shown in figures 7-10 and 12, the input to McIntyre system is an image (e.g., printed) that is optically scanned by a user. McIntyre describes imaging algorithms to analyze input images for a “perceptually significant feature”, to “compute a histogram of the digital image”, “analyze coherent colors to identify perceptual colors”, “compute...pixel of colors”, “analyze perceptual significant colors in the image”, “represent digital image in terms of the perceptual significant colors”, and to “search database and associated index structure to identify database digital images that contain at least one perceptual significant in common with the query image.”

Amended claim 29 recites an information apparatus on which digital data content has been previously stored locally or to which the content is downloaded from a server over a network. Examples of such an information apparatus are described in the application as including a desktop computer, a laptop computer, a networked computer, a palmtop computer, a hand-held computer, an Internet enabled mobile phone, or a smart phone. Applicant submits that the recited information apparatus is distinct from the netpage pen of Silverbrook and the optically scanned images of McIntyre.

Silverbrook emphasizes that the netpage pen is a solid state sensor capable of reading “invisible” ink on tags and transmitting the information read from the tags. Silverbrook describes scanning printed material with the netpage pen sensor, as described at col. 8, lines 59-64:

Tags are printed in infrared-absorptive ink on any substrate which is infrared-reflective, such as ordinary paper. Near-infrared wavelengths are invisible to the human eye but are easily sensed by a solid-state image sensor with an appropriate filter.

A printed tag is sensed by an area image sensor in the netpage pen, and the data read from the tag is transmitted to the netpage system via a netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are “error-correctably encoded” to make them partially tolerant to surface damage.” (Col. 8, lines 59-64, Silverbrook)

There is no teaching or suggestion of previously storing digital data content on the netpage pen or downloading to it content from a server over a network. Instead, data in the Silverbrook system is printed as a tag in invisible ink on paper. Likewise, information in the system of McIntyre is included in a printed image. A printed sheet of paper is not an information apparatus that previously stores digital data content or downloads it from a server over a network. The netpage pen reads and transmits the printed tag, but the netpage pen does not previously store the digital data content or download it from a server over a network. Applicant submits therefore that the cited references do not teach or suggest the information apparatus recited in the claim.

Moreover, the use of printed tags by Silverbrook and printed images in McIntyre, including the scanning of tags from printed material with a sensor pen, would lead one skilled in the art lead one away from storing content locally at an information apparatus or downloading the content from a server over a network to the information apparatus. Silverbrook and McIntyre are directed to optically reading printed matter or images. As a result, Silverbrook and McIntyre would lead one away from storing information on an information apparatus that stores or downloads digital data content.

Moreover, claim 29 and its dependent claims are also patentably distinct from the cited references for the following additional reasons.

With regard to the claim feature “receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search and the attribute corresponding to each wireless device found in the search being at least one of a name, a device type, a device address number, a security code, and a device profile,” the examiner cites from Silverbrook “Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless” (Silverbrook, col. 8, lines 52-56).

Applicant notes that the recited “tags” of Silverbrook are information printed on paper. The tags of Silverbrook are not device dependent attributes, corresponding to each wireless device found in the search and received from each found wireless device over the wireless communication channel. Information in the tags of Silverbrook are read from paper that is “printed in infrared-absorptive ink on any substrate which is infrared-reflective such as ordinary paper.” Likewise, McIntyre provides no teaching or suggestion of “receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search and the attribute corresponding to each wireless device found in the search being at least one of a name, a device type, a device address number, a security code, and a device profile.” Applicant

submits, therefore, that the rejection should be withdrawn because the cited references fail to teach or suggest this feature.

Also, applicant submits that the cited references do not teach or suggest “conforming, at the information apparatus, at least part of the content into an output data, the conforming using at least in part the said device dependent attribute received from the selected wireless output device and over the wireless communication channel, the output data comprising at least one digital file encoded with a digital format that include the content.” With regard to this feature, the Examiner cites from Silverbrook:

A sequence of captured strokes is referred to as digital ink. Digital ink forms the basis for the digital exchange of drawings and handwriting, for online recognition of handwriting, and for online verification of signatures.

The pen is wireless and transmits digital ink to the netpage printer via a short-range radio link. The transmitted digital ink is encrypted for privacy and security and packetized for efficient transmission, but is always flushed on a pen-up event to ensure timely handling in the printer.” (Silverbrook, col. 18, line 13)

However, Silverbrook is directed to interaction between a netpage pen and a dedicated netpage printer. “The netpage pen...works in conjunction with netprinter” (Silverbrook Col 6 line 35). The netpage pen and dedicated netpage printer in Silverbrook are an integrated whole. The dedicated, integrated netpage system of Silverbrook provides no teaching or suggestion of receiving over a wireless communication channel a device dependent attribute from each wireless device found in the search, the attribute including at least one of a name, a device type, a device address number, a security code, and a device profile. Also, the dedicated, integrated netpage system of Silverbrook provides no teaching or suggestion of conforming content according to device dependent attributes, as recited in the claim. Silverbrook merely reads a printed page and transmits what is read to a dedicated printer. Likewise, McIntyre provides no teaching or suggestion of these features.

As described in the present application, conforming data content using a device dependent attribute received from the selected wireless output device over the wireless communication channel allows the content to be more suitable for rendering at the selected wireless output device. Moreover, it is more flexible and adaptable for the information apparatus to communicate with different wireless devices that may have different device dependent requirements and attributes, such as, but not limited to quality of service, type of service, pricing for the service, and input requirements (e.g. the output data format) that is more acceptable as input for rendering at the output device, among others.

By describing a system of dedicated and integrated components, Silverbrook teaches that a dedicated and integrated system would be superior to an open system that would require conforming content according to device dependent attributes. Applicant submits, therefore, that the dedicated and integrated components of Silverbrook's netpage system would lead one away from conforming content according to device dependent attributes, as recited in the claim.

Examiner notes that Silverbrook does not disclose selecting a wireless output device found in the search based at least in part on the received attributes, the output device being at least one of a printing device, an audio device and a display device. The Examiner quotes from McIntyre:

This object is achieved by a method of analyzing an image provided by a user to determine the likelihood of user interest in materials related to products of third parties and sending such materials for display or printing for the user, comprising:

a) scanning a hard copy of an image provided by a user to provide a digital image and sending such image to a memory location;

b) automatically analyzing the scanned digital image to determine the likelihood that materials related to products will be of interest to the user by recognizing features which relate to the product of users, such features being selected from the group consisting of product trademarks, product trade dress, and other products which are related to the third party products; and

c) selecting one or more items of product materials based on their likelihood of interest to the user and sending them to the user for display or printing.” (McIntyre, col. 2, lines 18-41)

McIntyre, like Silverbrook, is directed to optically scanning a printed or hard copy image. McIntyre does not describe or suggest a method of transferring digital data content from an information apparatus to a wireless output device, the content being previously stored locally at the information apparatus or downloaded from a server over a network to the information apparatus. Instead, McIntyre describes “scanning a hard copy of an image provided by a user to provide a digital image.”

McIntyre describes automatically analyzing a scanned digital image to determine the likelihood that materials related to products will be of interest to the user by recognizing features which relate to the product of users, such features being selected from the group consisting of product trademarks, product trade dress, and other products which are related to the third party products. McIntyre is directed to searching for trademark images in an optically scanned image. McIntyre does not teach or suggest searching wirelessly for a wireless device that is available for wireless connection, including receiving over the wireless communication channel a device dependent attribute from each wireless device found in the search, the attribute corresponding to each wireless device found in the search and being at least one of a name, a device type, a device address number, a security code, and a device profile.

Moreover, the scanning of images by McIntyre is directed to scanning and automatically analyzing a printed image to recognize certain features (e.g., product trademarks) based on perceptual and color information contained in the image. McIntyre is wholly unrelated to receiving over a wireless communication channel attributes from wireless devices found in a wireless search. The images scanned by McIntyre do not contain device dependent attribute corresponding to each wireless device found in the search.

Also, McIntyre does not teach or suggest selecting a wireless output device found in the search based at least in part on the received attributes from each wireless device found in the search, and the attribute corresponding to each wireless device found in the search. Instead, McIntyre describes “selecting one or more items of product materials based on their likelihood of interest to the user and sending them to the user for display or printing.” McIntyre emphasizes automatically analyzing the scanned digital image from “a hard copy... provided by a user.” to determine the likelihood that materials related to products will be of interest to the user.” (McIntyre Col 2, line 18-41). Such scanning is not “selecting a wireless output device found in a wireless search ...” as recited in claim 29.

For the foregoing reasons, applicant submits that claim 29 and its dependent claims are patentably distinct from the cited references and request that the rejection be withdrawn. Likewise, applicant submits that the remarks directed to claim 29 are similarly applicable to independent claims 31, 50, and 51, and their respective dependent claims.

Applicant believes the application is in condition for allowance and respectfully requests the same.

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Respectfully Submitted,

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